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EXAMINER

VAN DOREN, BETH

ART UNIT PAPER NUMBER

2163

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Please find below and/or attached an Office communication concerning this application or proceeding.

24A

|                              |                |              |  |
|------------------------------|----------------|--------------|--|
| <b>Office Action Summary</b> | Applicant No.  | Applicant(s) |  |
|                              | 09/474,974     | SAMRA ET AL. |  |
|                              | Examiner       | Art Unit     |  |
|                              | Beth Van Doren | 2163         |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 December 1999.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 29 December 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      5) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      6) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4                      6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. The following is a non-final, first office actions on the merits. Claims 1-21 are pending.

#### ***Specification***

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Method and System for increasing the efficiency of targeted marketing campaigns using embedded models and historical data.

3. The disclosure is objected to because of the following informalities: typographical error. On page 4, line 32, two punctuation marks follow the word "value". Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 14-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 14-20 recite the limitation "to combine models". There is insufficient antecedent basis for this limitation in the claim. Parent claim 11 on which claims 14-20 are dependant makes no reference to the generation, existence, or context of models used in the analysis. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Jackson et al.

(Strategic Database Marketing).

6. As per claim 1, Jackson et al. discloses a method for increasing the efficiency of marketing campaigns using a targeting engine for analyzing data input and generating data output, said method including the steps of:

using historical data to determine a target group based upon a plurality of embedded models (See pages 27-29 in which Jackson et al. discusses populating a marketing database with historical data and using this data for marketing intelligence (i.e. analyzing the data to make detailed marketing decisions). See also page 39, in which Jackson et al. discloses targeting the product to the correct consumer group using database-driven marketing programs, the programs including the use of models predicted from customer profile data. See for example pages 40-41 in which Jackson et al. talk about using lifetime value models to identify customers. See also pages 173-185 which disclose the use of scoring models to target groups of customers, specifically the use of multiple models for targeting marketing campaigns); and

directing the marketing campaign towards the target group flagged by the models (See again page 39, in which Jackson et al. discusses directing database driven marketing programs at the right customers in order to make a sale. See pages 40-43 wherein Jackson discusses how to identify the “best” customers, which includes the use of said models. See also pages 158-165, which discuss the use of segmentation for targeting marketing campaigns).

7. As per claim 2, Jackson et al. further discloses a method wherein said step of using historical data to determine a target group based upon a plurality of models further comprises the step of combining models to determine a depth of a targeted mailing (See page 162 in which Jackson et al. states that the size of the database (i.e. the number of customer records) is not the key to successful marketing, but the relevancy of the records contained therein. Segmentation is revealed as a way to manipulate the records in the database to produce relevant groups to target. On page 165, the 60-20 rule is revealed, explaining how about 20 percent of the records in the seemingly large database account for 80 percent of a company's business. Again, a method of market analysis using appropriate segmentation and modeling determines the appropriate depth of the database to target market. See also pages 184-185, which disclose the use of multiple models to properly fit marketing needs and properly predict customer behavior).

8. As per claim 3, Jackson et al. teaches a method wherein said step of using historical data to determine a target group based upon a plurality of models further comprises the step of combining models to determine the likelihood of a customer response (See pages 40-41 in which Jackson et al. discusses using an RFM, or recency, frequency, and monetary, analysis that identifies the "best customers" with the best buying potential and also performing a comparison analysis on these prediction models to locate the segments of customers in the database with the best buying potential. See also page 174 in which Jackson et al. discusses scoring models that predict how individuals will behave in the future and their likelihood of response or purchase. See also pages 184-185, which disclose the use multiple models to properly fit marketing needs and properly predict customer behavior).

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9. As per claim 4, Jackson et al. further discloses a method wherein said step of using historical data to determine a target group based upon a plurality of models further comprises the step of combining models to generate a potential customer list (See again pages 40-43 which discusses creating a marketing list by identifying the best current customers as well as identifying new customers to market products to. See also pages 184-185, which disclose the use of multiple models to properly fit marketing needs and properly predict customer behavior).

10. As per claim 5, Jackson et al. teaches a method wherein said step of using historical data to determine a target group based upon a plurality of models further comprises the step of combining models to determine a risk factor for a target group (See page 184-185 which discusses combining scoring models to take into consideration the prediction of risk when segmenting a customer database for targeted marketing).

11. As per claim 6, Jackson et al. discloses a method wherein said step of using historical data to determine a target group based upon a plurality of models further comprises the step of combining models to determine expected profitability per customer of a marketing campaign (See pages 174-177 in which Jackson et al. discusses using scoring models to determine the profitability of each customer and then segmenting the customer database based on this information as well as the customer's likelihood of response. Each segment is evaluated as to its profitability. See also pages 184-185, which disclose the use of multiple models to properly fit marketing needs and properly predict customer behavior).

12. As per claim 7, Jackson et al. teaches a method wherein said step of using historical data to determine a target group based upon a plurality of models further comprises the step of combining models to determine the expected profitability per product of a marketing campaign

(See page 158-163, specifically page 163, which discusses modeling individual customers to conduct product segmentation which identifies target audiences that have the highest probability of purchasing the identified product, thus creating the most revenue. See also pages 184-185 which disclose the use of multiple models to properly fit marketing needs and properly predict customer behavior).

13. As per claim 8, Jackson et al. discloses a method wherein said step of directing the marketing campaign towards the target group flagged by the models further comprises the step of rank ordering accounts (See pages 173-177 in which modeling to predict future behavior of customers is disclosed. Specifically see page 174, which discusses using these models to rank every individual in the database based on his/her respective accounts and future buying potential).

14. As per claim 9, Jackson et al. further discusses a method wherein said step of directing the marketing campaign toward the target group flagged by the models further comprises the step of segmenting accounts based on customer demographics (See pages 158-163, specifically page 163, which discusses modeling individual customers to conduct demographic segmentation which ranks and sorts customers or ranks and sorts products and services based on attributes such as age, occupation, and marital status).

15. As per claim 10, Jackson et al. further teaches a method wherein said step of directing the marketing campaign toward the target group flagged by the models further comprises the step of identifying cross-sell targets (See page 44 in which Jackson et al. discusses matching the modeled predictive profiles of the customers in the database with the profiles of either products or other customers to locate cross-sell opportunities. See also pages 86-87, which again

discusses identifying cross-sell targets based on profile information stored in the marketing database).

16. As per claim 11, Jackson et al. discloses a system configured to increase the efficiency of marketing campaigns, said system comprising:

a customer database which includes customer demographics and historical data (See pages 27-30 wherein Jackson et al. discuss the demographic and historical data contained in the customer database);

a targeting engine for analyzing data input and generating data output (See page 158 which discusses segmentation as the process of manipulating the database by dividing it into subsets, each subset with a common characteristic. See also pages 174-185 which discusses the program building scoring models to manipulate the data in the database. In both cases the rankings and groupings created are used for targeting purposes); and

a graphical user interface for accessing a customer database and displaying data output (See pages 119-122 in which Jackson et al. discuss database processing systems, specifically database management systems, that create, modify, and control access to the information stored in the database. As shown in figure 8-3, reports are generated through the system. See also pages 130-135 which discusses system data structures and platforms employable for system implementation. Specifically, pages 133-134 disclose the use of server technology, including PCs with LAN access to a central storage unit. As it is well known in the area of server technology, these PCs would be equipped with GUIs. See also pages 156-157, which further discuss system data structures and platforms that include tools for counting, profiling, reporting, research, and other business planning using the data stored in the database).

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17. As per claim 12, Jackson et al. discloses a system further configured to use historical data in said customer database to determine a target group for marketing based upon a plurality of models (See page 39, wherein Jackson et al. discloses targeting the product to the correct consumer group using database-driven marketing programs, the programs including the use of models drawn from customer profile data. See, for example, pages 40-41, wherein Jackson et al. discusses the use of lifetime value models to identify customers for the target group. See also pages 173-185 wherein Jackson et al. discusses the use of scoring models).

18. As per claim 13, Jackson et al. discloses a system further configured to use historical data in said customer database to direct a marketing campaign towards a target group flagged by the plurality of models (See again page 39, wherein Jackson et al. discusses directing database-driven marketing campaigns at the right customers. See also pages 158-165 which discusses segmenting the customer database into subsets based on specific characteristics, these specific characteristics causing certain subgroups to be flagged as more inclined to respond to a particular targeted marketing campaign).

19. As per claims 14-21, claims 14-21 are system versions of claims 2-9, respectively. Since the specification provides nothing more than a method implemented in a network environment, claims 14-21 are rejected on the same grounds as the method of claims 2-9, respectively.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chou et al. (U.S. 6,061,658) teaches the use of a scoring model which incorporates historical data to segment a database of customers.

Walter et al. (U.S. 6,334,110) discloses using historical data about customers past transactions and interactions, as well as their profiles, to segment these customers into target groups for marketing and cross-selling opportunities. Modeling of these customers is done using data mining and weighting techniques.

Jenkins (U.S. 6,285,983) teaches the use of data mining tools, such as SAS and DataMind, to create marketing profiles of customers contained in a database.

Verba et al. (U.S. 6,236,977) discloses the use of relational databases (containing demographical and historical data) to develop marketing campaigns and then harvest data about responses to these campaigns. A matching process assesses the profile data, identifying customers to target based on a scoring algorithm reflecting the recency, frequency, and cost of contacts versus their sales revenue potential. Also disclosed are object oriented business models.

Nash (*Database Marketing*) teaches an overview of marketing techniques when utilizing a database, specifically cross-selling, modeling, segmentation, and target marketing.

Bort ("Data mining's midas touch") discusses discovery driven data mining for predictive modeling, database segmentation, link analysis, and deviation detection. Using data mining tools, "good" and "bad" customers can be identified in the database and then targeted for advertising and cross-selling campaigns.

Cross ("Profiting from Database Marketing") discloses profitable database marketing through segmentation, the application of modeling and regression analysis, targeted marketing, cross selling, historical customer data, generating customer lists, etc.

"Database Marketing: Improving Service and Profitability by Segmenting Customers..." discloses storing data concerning potential customers in a database and using this information to


develop appropriate customer segmentation schemes, modeling approaches, scoring, and profiles to determine the best marketing strategies and service levels to attract the business of said customers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beth Van Doren whose telephone number is (703) 305-3882. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

bvd  
March 28, 2002

  
KYLE J. CHOI  
PRIMARY EXAMINER  
*Art Unit 2163*